



Outline

Abstract

Graphical abstract

Keywords

1. Introduction
 2. SARS-CoV-2, COVID-19 and curcumin
 3. Safety and limitations
 4. Conclusion
- CRediT authorship contribution statement
- Declaration of competing interest
- Acknowledgments
- References

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Full length article

Curcumin, a traditional spice component, can hold the promise against COVID-19?

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Abstract

The severity of the recent pandemic and the absence of any specific medication impelled the identification of existing drugs with potential in the treatment of Coronavirus disease-2019 (COVID-19), caused by severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2). Curcumin, known for its pharmacological abilities especially as an anti-inflammatory agent, can be hypothesized as a potential candidate in the therapeutic regimen. COVID-19 has an assorted range of pathophysiological consequences, including pulmonary damage, elevated inflammatory response, coagulopathy, and multi-organ damage. This review summarizes the several evidences for the pharmacological benefits of curcumin in COVID-19-associated clinical manifestations. Curcumin can be appraised to hinder cellular entry, replication of SARS-CoV-2, and to prevent and repair COVID-19-associated damage of pneumocytes, renal cells, cardiomyocytes, hematopoietic stem cells, etc. The modulation and protective effect of curcumin on cytokine storm-related disorders are also discussed. Collectively, this review provides grounds for its clinical evaluation in the therapeutic management of SARS-CoV-2 infection.

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Keywords

COVID-19, Curcumin, Cytokine storm, Inflammation, Molecular targets

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